

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013010**Date Inspected:** 26-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Wang Xu

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Bay 14**

This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 is using flux cored welding process to weld a temporary lifting attachment plate to the top of corner assembly CA3004C. This QA Inspector observed a welding current of approximately 245 amps. This QA Inspector observed Mr. Yuan Wensong appears to be certified to make this weld. This temporary weld does not have any number assigned. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Hue Junrong, stencil ris using flux cored welding procedure WPS-B-T-2231-B-U2-F to make OBG weld SEG5006A-001. This weld is located in OBG segment 12CW. This QA Inspector measured a welding current of approximately 310 amps and 30.5 volts. This QA Inspector observed Mr. Hue Junrong appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jin Chen Mao, stencil 058551 using flux cored welding procedure

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WPS-B-T-2133 to make OBG weld between floor beam FB3015-003 and longitudinal diaphragm LD3010-001 near panel point 114.5 at OBG segment 12CE. This QA Inspector observed a welding current of approximately 311 amps and 30.5 volts. This QA Inspector observed that Mr. Jin Chen Mao is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Yard between Bay 17 and blast shop #2

This QA Inspector observed ZPMC welder Mr. Kua Wen Shau, stencil 054013 is using shielded metal arc process to make weld SEG052E-022 and other adjacent welds near where segment SEG9BE will be connected to cross beam CB11. This activity is taking place on the top of a scaffold in the yard between bay 17 and blast shop #2. This QA Inspector observed no QC personnel appeared to be working near this location from the hours of 19:30 through 20:15. The Caltrans Special Provision Section 8-3.01 states: "QC inspections shall be provided to ensure continuous inspection when any welding is being performed. Continuous inspection, as a minimum, shall include (1) having QC Inspectors continually present on the shop floor or project site when any welding operation is being performed, and (2) having a QC Inspector within such close proximity of all welders or operators so that inspections by the QC Inspector of each operation, at each welding location, shall not lapse for a period exceeding 30 minutes." At around 20:20 hours this QA Inspector went to OBG Bay 14 and informed ZPMC QC Inspector Mr. Lu Liqing that no QC Inspectors appear to be monitoring Mr. Kua Wen Shau as he is welding segment 9BE. Mr. Lu Liqing informed this QA Inspector that he is not aware that anyone is welding at this location. Mr. Lu Liqing accompanied this QA Inspector to OBG segment 9BE and observed Mr. Kua Wen Shau was continuing to perform welding on segment 9BE stiffener plates. This QA Inspector asked Mr. Lu Liqing to phone ZPMC CWI Mr. Wang Xu and ask him to come to segment 9BE. Approximately ten minutes later Mr. Wang Xu arrived and this QA Inspector informed him that an incident report is being issued to document welding without CWI /QC personnel performing monitoring of this activity. See the photographs below for additional information.

Yard, north of bay 19

This QA Inspector observed ZPMC welder Mr. Xu Fubao, stencil 200569 is using shielded metal arc process to weld longitudinal diaphragm LD012-016 to side plate SP771A inside OBG segment 9CW near panel point PP77.5.

This QA Inspector observed a welding current of approximately 180 amps and this QA Inspector observed Mr. Xu Fubao appears to be certified to make this weld. This QA Inspector observed this welding taking place at approximately 21:00 hours and at around 21:15 hours Mr. Fubao stopped welding and he began to roll up his electrical cords in preparation for ending his work shift. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch.

Items observed on this date appear to comply with applicable contract documents.

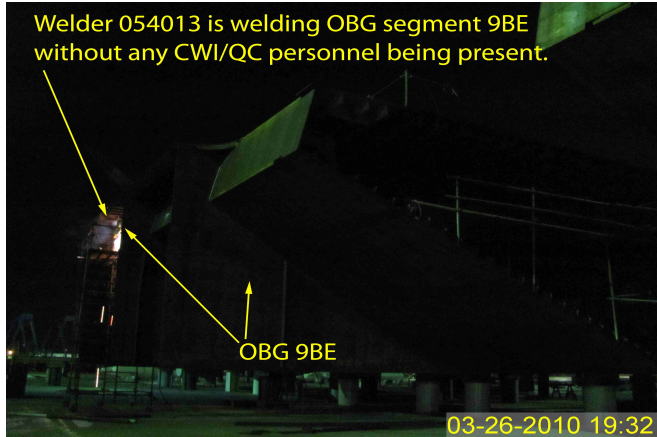
This QA Inspector observed ZPMC welder Mr. Wang Fu Peng, stencil 205718 is using shielded metal arc process to weld longitudinal diaphragm LD011-018 to side plate SP161A inside OBG segment 9CW near panel point PP77.5. This QA Inspector observed a welding current of approximately 165 amps and Mr. Wang Fu Peng appears to be certified to make this weld. This QA Inspector observed this welding taking place at approximately 21:00 hours and at around 21:15 hours Mr. Wang Fu Peng stopped welding and he began to roll up his electrical cords in preparation for ending his work shift. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appear to comply with applicable contract documents.

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### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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